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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/634,153      | 08/04/2003  | Ward D. Parkinson    | ITO.0553US (P16341) | 5107             |

21906 7590 02/16/2006

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| EXAMINER |
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NGUYEN, VIET Q

|          |              |
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| ART UNIT | PAPER NUMBER |
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2827

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/634,153

Applicant(s)

PARKINSON ET AL.

Examiner

Viet Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Appeal Brief filed on 12/05/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims **1-25** are pending for examination.

In response to the applicant's appeal brief and arguments filed on **12/05/2005**, this non-final action supplements the last Final Office action dated **08/01/2005** and now raises some new rejection grounds and/or observations on the existing claim language.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims **2, 11, & 22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims **2, 12, & 22**, the phrase "**selectively enabling digital or analog data to be stored**" is vague and indefinite because it is impossible for such only-recited "***analog***" memory form (as recited in claim 1) to be able to store any "**digital**" data format besides as simply claimed. That is, since "analog" memory can only store "analog" data type as well-known in the art for storing waveforms, and "digital" data format is totally different from the "analog" data format in terms of bits and bytes, how can any pure "analog" memory can store any "digital" format, or how can it then be switched back and forth (or selectively enabled) easily between two different

types/structures of memories (i.e., analog versus digital) ***without any major design changes, or data format conversions, and/or modified constructions to the internal structure itself***. Since claim 1 recites only one form of storage (i.e., analog), one skilled in this art must presumably assume that only “analog” data format can be stored so, and he/she could not presumably assume otherwise (i.e., storing digital also). Therefore, for one having ordinary skilled in this memory art to clearly understand and carry out such invention, does claim 2 language also imply that the pure “***analog***” memory form of claim 1 can also be called otherwise as “***digital***” memory form and using such a same phase change material and so it can be used to store any form without any further major structural differences as well? If so, claim 1 should be modified so in order to indicate the two possible data formats, or inherent forms of storing capability (i.e., analog and digital), or that it can be selective and/or store both, or claim 2 should be amended to fix its improper antecedent basis. Otherwise, these claims are considered as vague and confusing for lacking antecedent support.

Regarding claims **14, 15, 16, & 23-25**, the phrases “***said memory to store digital and/or analog data***” also incorporates the same defect/problem as claims **2, 12 & 22** pointed out above since besides “analog” data, any pure “analog” memory can not store further “digital” data as discussed above.

***Claim Rejections - 35 USC § 103***

4. Claims **1-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ovshinsky (RE 37,259)**, **Klersy et al (5,933,365)**, **Czubatyj et al (5,825,046)**, or **Van Brocklin et al (US 6,879,525)**.

The reasons for this rejection has been set forth & fully discussed in the Final office action dated **08/01/2005** and now maintained in this action because the pending claims simply call for a memory that can store analog and/or digital data that also literally reads on the exact wording of "**analog**" or "**digital**" memory words as seen/shown in these prior arts. Thus, without any claimed structural support found (in the pending claims) for these simple terms to single out the patentable differences, the applicants' arguments (on the structural differences and literal meanings of these simple claim terms ***interpreted*** over the existing prior art teachings) are not well grounded and understood, and thus they have been considered by the examiner but found not fully convincing.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



V. Nguyen  
2/14/2006



VIET Q. NGUYEN  
PRIMARY EXAMINER